DiskMonTools

	COLLABORATORS		
	TITLE : DiskMonTools		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		July 1, 2022	

	REVISION HISTORY		
NUMBER	DATE	DESCRIPTION	NAME

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DiskMonTools

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```
            ####   ##         ##      ##    ##                 ######              ←
                ##~~~~~~~~~~
  ## ##           ##        ### ###                  ##                   ##  ~~~~~~~~~
  ## ## ##   ####  ##  ## #######  ###  ####   ##  ###   ###  ##    ####~~~
  ## ## ## ##      ## ##  ## # ## ## ## ## ##  ## ## ## ## ## ##  ##    ~~
  ## ## ## ####  ####    ##   ## ## ## ## ##  ## ## ## ## ## ##   ####~~~
  ## ## ##     ## ## ##   ##   ## ## ## ## ##  ## ## ## ## ## ##     ##~~
  ####     ## ##### ## ## ##   ## ### ## ##  ##  ###   ###  ## #####  ~
                                                                    ~~
```

```
                Version 3.10~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

                - English manual -~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

```
        !!! Shareware !!!
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

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~
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```
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               ~

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               ~
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               ~~~~~~~~~~~~~~~~~~
```

 Many thanks to the few registered users of DiskMonTools.~

1.2   what is diskmontools ?

```
               DiskMonTools (DMT) is a program, which has many tools for  ←
                   Floppydisks,
Harddisks, CD-drives, RAM-Disks etc.
```

```
With DMT you can
               edit
               data on any drive (hexadezimal and ascii).
Supports all block-orientated devices, such as FloppyDisks,
Harddisks, RAM-Disks, CD-ROMs, File-Partitions, etc.
All Amiga-FileSystems (OFS, FFS, INTL OFS, INTL FFS, DirCache OFS
and DirCache FFS) are supported as well as partitions with
blocksizes other than 512 bytes and you can edit the harddisk's
Rigid-Disk-Blocks.
You have additional functions, for example search data, find file-
headers, jump to Parent-/Header-/DirChache-/... Blocks, etc.
```

```
You may also
               edit data in files
               . With DMT it
is possible to edit files that are
               larger than the availible RAM
               .
In the FileMonitor you may search for data (hex and ascii).
```

```
With the
               MfmEditor
               you may even edit the MEM-Encoded Data on
Floppy-Disks (the format the data is stored physically on the drive).
It has additional features, such as sorting the data, move data,
index-sync read/write (for PC-Disks), check the checksumms (for
trackdisk, diskspare and mfm.device disks), ...
```

Read-/Write-Errors on Floppy-Disks (only DFx:, trackdisk.device) may
be corrected using
                    RepairTrack
                    .

On DD-Disks and compatible File-/Ram-Disks (880 KB) you can view/edit
the BAM (Block-Availible-Map) with the
                    BamEditor
                    .

Deleted files can be recovered using
                    Undelete
                    .

If you have errors on a filesystem (disk not validated) you may use

                    Salvage
                    to restore all files of a Partition.

The
                    read-speed
                    of any drive can be calculated.

To speed up the file access, use the
                    Optimizer
                    to reorganize the
filesystem-structure. Optimizing for WorkBench-access (Icons) is
as well possible as optimizing for read-only or read/write and
access to the first bytes of all files can be speed up (for file-
type recognizing tools), ...

Audio-CDs can be played using the
                    CD Player
                    . This CD-Player does
not have manny features but (therefore) works with manny drives and
controllers.

DiskMonTools is
                    Shareware
                    !!!

USE AT YOUR OWN RISK, LOSS OF DATA POSSIBLE IF YOU DO
SOMETHING WRONG !!!!!!!!!!

1.3   problems

XFH:
If you are using a XFH-Partition and the underlying FileSystem is
"Inhibited" (DiskMon/NDOS, by using Undelete or DiskOptimizer), and
you access the XFH-Partition at the same time, a DeadLock will occur.
By using "Assign <Volume-name> DISMOUNT" to remove the unpacked drive
(to hide it from the WorkBench) and an "Inhibit" is done, the packed
drive will be lost (i.e. you can't access it any longer until you

reboot).
This problem is not a bug in DMT, it is a problem of the XFH, other
tools using "Inhibit" will cause the same errors.

Graphic-Boards:
Read the section Installation/Requirements/ToolTypes/RTG.
With OS 3.1 and ToolType RTG, DMT should run on ANY
Graphic-Board !

SCSI/AT-Controller:
If your controller does not support SCSI-dircet-commands (and the
system crashes) use the ToolType "NoSCSI".
Other devices may also crash if SCSI-dircet-commands are used,
if you have such a device use "NOSCSI" too.

1.4 copyright

                Copyright

DiskMonTools is NOT Public Domain, it is © by
                Jörg Strohmayer
                ,
any commercial usage or selling without author's written authorization is
strictly forbidden. You can freely distribute DiskMonTools V3.10 under the
following conditions:

 - All files must be distributed together, no file may be added or removed.

 - The files may not be modified in any way. The only exception is that ALL
   the files may me compressed into ONE archive for distributing it via
   Bulletin Boards or other electronic transmission.

 - You don't charge more than a reasonably copying fee.

 - The key-file ('DiskMonTools.Key') must NEVER be distributed in ANY way.

 - If you want to use DiskMonTools after testing it, you have to pay the

                Shareware
                 fee.

 - By copying, distributing and/or using the program you indicate your
   acceptance of this conditions.

NewIcons

The DMT-Icons support the "NewIcons"-System by Nicola Salmoria.
The guide-Icons are taken from the NewIcons Package by
Nicola Salmoria, Roger McVey and Philip A. Vedovatti.

Warranty

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are provided "AS-IS" and subject to change without notice; no
warranties are made. All use is at your own risk. No liability or

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THE COPYRIGHT HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE
POSSIBILITY OF SUCH DAMAGES.

Registered trademarks are not marked separately.
Therefore absence of a trademark does not imply they are free.

1.5 installation

Requrements

DiskMonTools (DMT) V3.10 needs OS 2.04 (V37) to run.
DMT uses the asl.library for FileRequesters.
DMT requires the diskfont.library, if you want to use other fonts
 than Topaz/8.

Installation

No special Installtion is required, simply copy DiskMon to
any directory you like.
Registered users have to copy the file "DiskMonTools.Key" to the same
directory. Starting with DMT 3.1 the file "DiskMonTools.Key" may be
copied to "SYS:Prefs/Presets", "ENVARC:" or "S:".

ToolTypes

To allow changing the ToolTypes if DMT is on a CD-Rom, the ToolTypes
are read from "Sys:Prefs/Presets/DiskMonTools.info" (if it exists,
if not the "normal" Icon is used).
If you have DMT on a CD-Rom, copy DiskMonTools.info to
"Sys:Prefs/Presets" and change the ToolTypes there.

DiskMonTools supports the following ToolTypes:

ScreenMode : With this ToolType you can select a ScreenMode, for Example
             ScreenMode=0x8000 - Default HighRes
             ScreenMode=0x29000 - Pal HighRes
             ScreenMode=0x19004 - Ntsc HighRes Interlace

```
                    ScreenMode=0xA9000 - DblPal HighRes (AGA only)
                    ScreenMode=0x69024 - Euro72 Productivity
                    ScreenMode=0x89020 - Super72 SuperHighRes
                    ScreenMode=0x39024 - Multiscan Productivity
                    ScreenMode=0x39020 - Multiscan 640x240 (AGA only)
                  DiskMonTools trys to open a 8-Color screen. The
                  DiskOptimizer shows more information if you have 8 colors,
                  so if you don't have an AGA-Amiga you should use the PAL-
                  Screenmode (or if not availible NTSC HighRes Interlaced)
                  if you want to use the DiskOptimizer.
                  If this ToolType is not specified, DiskMonTools opnes a
                  "BestModeID"-Screen (OS >= 3.0) or trys to open a
                  Pal-HighRes and if it fails a Ntsc-HighRes-Interlace screen.
RTG         : If you have problems with graphic-boards try this ToolType.
Window      : If DMT does not run on a graphic-board with the ToolType RTG
                  you may try this ToolType. Now DMT does not open a Screen
                  but a Window on the default public-screen (normaly the
                  WorkBench-Screen). This Screen has to have at least 4
                  colors and the screen-height has to be 256 or more.
                  You should only use this ToolType if you have a
                  graphic-board and DMT does not run with the ToolType RTG,
                  because DMT does not open a 'normal' Window (the window
                  has no borders, no (standart) dragbar etc.).
NoSCSI      : By setting this ToolType, DiskMonTools does not use any
                  SCSI-Direct-Commands. (Use it if your Controller does not
                  support these commands). If "NoSCSI" is set, the Audio-CD-
                  Player can't be used.
256         : With this ToolType DiskMonTools supports Devices with
                  a BlockSize of 256, 512, 1024, 2048, 4096, 8192, 16384 and
                  32768 Bytes. Without this ToolType DMT only uses devices
                  with a BlockSize of 512 Bytes and CD-Roms.


Font        : Name of the font, which DMT will use.
FontSize    : Size of the font.
FontXDPI    : X- and Y-DPI of the font (only when using a scalable
FontYDPI      Intellifont®).
```

Default values are "Font=topaz.font", "FontSize=8", "FontXDPI=100"
and "FontYDPI=100". With the fonts that come with the Workbench you
can get the following:

```
Font                  FontSize  FontXDPI FontYDPI | FontSize ScreenSize
------------------------------------------------- +--------------------
(Topaz.font)            (8)       (100)    (100)  |  8* 8      640* 256
(Topaz.font)            11        (100)    (100)  |  8*11      640* 352
Courier.font            14 (*)    (100)    (100)  |  8*14      640* 448
LetterGothic.font       15        (100)     80    |  8*15      640* 480
LetterGothic.font       16        (100)     80    |  8*16      640* 512
LetterGothic.font       17        (100)     90    |  8*17      640* 544
LetterGothic.font       17        (100)     80    |  9*17      720* 544
LetterGothic.font       16        (100)     65    | 10*16      800* 512
LetterGothic.font       19        (100)     80    | 10*19      800* 608
LetterGothic.font       24        (100)     80    | 12*24      960* 768
LetterGothic.font       24        (100)     75    | 13*24     1040* 768
LetterGothic.font       28        (100)     80    | 14*28     1120* 896
LetterGothic.font       37        (100)     75    | 20*37     1600*1184
LetterGothic.font       38        (100)     80    | 20*38     1600*1216
```

```
(*) The font Courier/14 is scaled.
```

```
Note that if the x-size of a font is different from 8, RTG mode is on
(see ToolType RTG).
```

1.6   How to get a registered version ?

```
                 DiskMonTools is Shareware, if you want to use it you have to pay  ←
                   the
shareware fee. You will get a 'key-file' which removes the
Pay-Shareware-Requesters in DiskMonTools V3.10 and following versions.
```

```
                          Shareware fee
                          --------------
Register DiskMonTools   : DM 25 or US$ 20
Register DiskMonTools +
Disk with latest version: DM 30 or US$ 25
```

```
Please note that these are the minimum fees, if DMT is worth more
for you send more! If you want to get updates on disk add DM 5
(US$ 5 outside of europe) for each update and write that you want
to get updates on disk. Please send only Cash in DM or US$.
Fill in the
                 registration form
                  and send it to
                 me
                  along with the money.
```

1.7   register form

```
               DiskMonTools 3.10 Registration form
```

```
--------------------------------------------------------------------------
```

```
     Send the filled in registration form along with the money to:
```

```
                        Jörg Strohmayer
                        Im Bachacker 10
                        D-35232 Dautphetal
                        Germany
```

```
--------------------------------------------------------------------------
```

```
  Name      : _____
```

```
  Address   : _____
```

```
              _____
```

```
  Country   : _____
```

```
E-Mail   : _____


Where did you get your current copy: _____

_____


Suggestions for improvement/Bugs found: _____

_____

_____

_____

_____

_____

_____


Which tools of DMT are the most important for you: _____

_____

_____


                  _       _       _       _       _
Amiga-OS version: |_| 2.0  |_| 2.1  |_| 3.0  |_| 3.1  |_| Other: _____
  _                       _
 |_| Register DiskMonTools    |_| Register + Disk with latest Version
---------------------------------------------------------------------

    I have read the license and distribution details and agree.


   _____    _____
        (Date)                              (Signature)




---------------------------------------------------------------------

  Other information: (not required for registration, but recommendet)
            _       _       _       _       _       _
  Amiga: |_|  500  |_| 500+  |_|  600  |_| 1000  |_| 1200  |_| 1500
            _       _       _       _       _       _
         |_| 2000  |_| 2200  |_| 2500  |_| 3000  |_| 4000  |_| DraCo
```

```
             _      _      _
            |_| CDTV  |_| CD32  |_| Other: _____


                        _
    Manufacturer: |_| Amiga Inc. (Commodore)
                        _
                  |_| Amiga /// Technologies
                        _
                  |_| Other: _____


    Memory:  _____ MB Chip mem    _____ MB Fast mem


                           _       _
    Processor: 680__0   |_| FPU   |_| MMU   Turbo-board: _____


                    _       _
    Harddisk(s): |_| SCSI  |_| AT     _____ MB    Controller: _____
                    _       _
                 |_| SCSI  |_| AT     _____ MB    Controller: _____
                    _       _
                 |_| SCSI  |_| AT     _____ MB    Controller: _____


                                        _       _
    CD-Rom: _____ |_| SCSI  |_| AT Controller: _____

    Other Hardware:
     _
    |_| Graphic-Board: _____
     _
    |_| _____
     _
    |_| _____
     _
    |_| _____
     _
    |_| _____
```

1.8 My Address

          Send comments, suggestions, bug reports, etc. and the
          shareware fee
           to:

Jörg Strohmayer
Im Bachacker 10
D-35232 Dautphetal
Germany

js@apg.lahn.de

1.9 history

```
Version 3.10:
DiskMonTools    : Supports TD64 and NSD devices.


Version 3.9:
Optimizer       : Bug when optimizing a DirCache partition removed


Version 3.8:
CleanUp         : Removes deletet files.


Version 3.7:
CD-Player       : Did not work in 3.6


Version 3.6:
Undelete        : Now works with OldFileSystem
MFM-Editor      : Now only works with 'trackdisk.device' since the
                  test with TD_RAWREAD had some problems with some
                  SCSI-controllers and some CD-Roms.


Version 3.5:
Speed           : performes more tests.
Undelete        : (de-)select files with a pattern.
Optimizer       : Busy-Pointer weas not always switched off.


Version 3.4 AFS:
Undelete/Salvage: Works with AFS.


Version 3.4:
ToolTypes       : Are read from "Sys:Prefs/Presets/DiskMon.info", if
                  it exists (for usign DMT from CD-Rom).
FileMon-Ram     : Changes after position 0x10000 were not displayed.
PFS             : PFS support removed.
OS 2.0 (V36)    : Support removed, DMT now requires OS 2.04 (V37).
BUG-Fix         : In the DiskOptimizer the allocated memory was
                  not always freed completely.


Changes from 3.2 to 3.3:
Undelete        : New option "Tree".
ToolTypes       : New ToolTypes "NoSCSI" and "256".
MFM-Editor      : New gadget "TInfo".
DiskOptimizer   : New option "FastFiles".


Changes from 3.1 to 3.2:
DiskOptimizer   : Now much faster, faster than all other DiskOptimizers !
Font-Sensitive  : (ToolTypes Font,FontSize,FontXDPI,FontYDPI) DMT 3.2 now
                  can use a user-selectable font (and thereforce other
                  screen-sizes).
Undelete        : Can recover deleted files on ProfessionalFileSystem
                  (PFS) disks.
DiskMon         : Supports the PFS.
Undelete        : When displaying the root-directory, DMT did not display
                  all entries.
DiskMon - Check : Turn off 'Check' (to read for example RDB-blocks)
                  did not work in DMT 3.1.


Changes from 3.0 to 3.1:
```

```
68000-CPU        : Because of a bug, DMT 3.0 did only run on Amigas with
                     a CPU >=68020, DMT 3.1 now works again with all CPUs.
Some minor bugs removed: (for example the displayed number of total blocks
                           of partitions with a blocksize other than
                           512 bytes was wrong).
                         Screen was not autoscrollable.
DiskMon.Key      : May now be copied to SYS:Prefs/Presets, ENVARC: or S:
ToolType Window: DiskMonTools now can run in a window on the Workbench.
SoftLinks        : The DiskOptimizer now can optimize partitions with
                     softlinks.
FileMon (RAM)    : New FileMon, which loads the complete file into memory
                     and writes it after editing back to disk in a new file.
Speed            : Tests the speed of any drive.
CD-ROM support : The DiskMonitor now works with CD-ROMs.
CD Player        : Simple Audio CD-Player (but the only one that works with
                     my CD-Drive).
```

1.10 diskmon

With the DiskMonitor you can view and edit the blocks of a disk.

```
Gadgets:

Read
DiksMon reads and displays the selected block of the selected Drive.

Checksum
DiskMon calculates the checksum of the displayed block if the block type is
 - Root Block
 - Directory
 - File Header
 - File List
 - Boot Block (only if 'Check' is 'on')
 - old filesystem Data Block
 - Directory Cache Block
 - Hard Link
 - Soft Link
 - Rigid-Disk-Blocks (RDSK,PART,FSHD,LSEG,BADB,...)
Only use it if the block type is not '?? Unknown ??'.

Write
DiskMon writes the block to the selected block number and drive.
Remember to correct the checksum if required.

Edit
Selects the mode of editing. HEX means you have to enter the data as
hexadecimal (half-)bytes, ASCII for entering characters.

Search
A requester is displayed where you can select the startblock, endblock
and the text you whish to search. 'Stop' aborts while 'Search' starts
searching. If the text is found you can 'Stop' searching or continue
searching by clicking 'Search' again.
Search is case sensitive and no patterns are used.
```

If you want to search hexadecimal data you can do this by entering
'$' as the fist character (for example '$AB cd 12' which is equal to
'$ abc d12' but ' $AbcD12' is wrong because of the space before the '$').

Header
Search a fileheader on the selected disk.
Select the file-/dirname in the asl-requester and the fileheader of this
file/dir will be loaded and displayed.
ATTENTION: The file has to be on the selected drive, else you get the wrong
           block or an error.
If you don't have the 'asl.library', you have to enter the full path and
filename in the requester.

Repair (ONLY Floppy Disks)
If there is a read/write error on the disk you can't read the whole track,
but in most cases there is only one of the 11/22 blocks destroyed. Diskmon
reads the selected track and tries to recover as much data as possible. It
will be displayed which block is ok ('repaired') and which block could not
be corrected ('not repaired'). Now you are asked if you want to write the
data back to disk or not. You may change the disk to write the reults to
another disk. If you select 'Yes' the recovered data is written to the disk,
'No' aborts.
ATTENTION !!! if you write the data back to the same disk and there are
blocks which are not repaired, there is no chance of getting lost data back.

Quit
Return to the main-screen.

Display
This gadget selects which characters are displayed.
ASCII : characters 32-127
Visible: characters 32-127 and 160-255
All   : characters 0-255

Check
Toogles the range checking of the block number (only works, if the
blocksize of the partition is 512 bytes).
on : Default
off: The block number given is send directly to the device.
     On Harddisks for example, you get the rigid-disk-block if 'check' is
     off and you enter block number 0.
ATTENTION !!!: By changing the rigid-disk-blocks you may loose all the data
               on all your partion of the Harddisk.
ATTENTION !!!: If you get outside the range of a RAM-Disk like RAD: you
               view/edit any part of the memory which can cause a system
               crash.
Use 'Check off' with extreme caution and at your own risk.

Block
You can enter the block number decimal (1.Gadget) or hexadecimal (2.Gadget).
Use the '+' and '-' gadgets of Sec. to increase/decrease the block number.

Cyl.
You can enter the cylinder number decimal, increase '+' or decrease '-' it.

R - Root
The Gadget 'R' gives you the Root-Block of the disk/partion.

If 'Check' is off you get block number 0.

Head
You can enter the head number decimal, increase '+' or decrease '-' it.

Auto
If 'on', any change to the block number will read and display the new block
imediately. If 'off', you have to click 'Read' to get the new block.

Sec.
You can enter the sector number decimal, increase '+' or decrease '-' it.
Use '+' and '-' of Sec. to increase/decrease the block number.

NDOS
If 'on', no other task can use the drive you are viewing/editing. If 'off',
other tasks have access to the drive too (dangerous if you change data, if
you only want to view/search data you may set NDOS to 'off').

Header/Parent,Next/1.Data/DirCache
There are 2 gadgets 'Get', use these to get the block-number
displayed after the ':'. If 'Auto' is 'On' the block will be read.

Output:

Errors
Errors are displayed on the last line at the right side.

ChecksumOK
DiskMon displays if the CheckSum is right and used in the displayed block.
Checksum: 'Right' or 'Wrong'
          'Used !!!' or 'Not used'

Type
Type of the block or '?? unknown ??' if not a valid type. On
Fast-File-System disks '?? unknown ??' blocks may be data blocks.

Name
Name of file/dir/disk or nothing

Drive Information
<1>: unit <2> of <3>.device
<1>= name of the drive (DF0:, DH0:, RAD:, ...)
<2>= unit number (0 for DF0:, 3 for DF3:, ...)
<3>= name of the device (trackdisk, scsi, ramdrive, ...)
Blocks   : number of blocks   Cyls   : number of cylinders
Heads   : number of heads   Sectors   : number of sectors
RootBlock : block number of the Root-Block
Filesystem: DOS<x> (DOS<y>) : Filesystem on disk (FS reported from DOS)
            <x> and <y> may be:
            @=old filesystem   -DOS 0x00
            A=fast filesystem   -DOS 0x01
            B=international old filesystem   -DOS 0x02
            C=international fast filesystem   -DOS 0x03
            D=directory cache old filesystem -DOS 0x04
            E=directory cache fast filesystem-DOS 0x05

More Information is displayed in the main-screen when selecting the Drive.

1.11 The MFM-Editor (ONLY Floppy Disks)

```
               00000:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 ---- Mfm- ←
                   Editor ----
00020:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                 Read
                 Write
               00040:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                 TInfo
                 ISync
               00060:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 WriteLen

               00080:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 PreWrite

               00100:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 Cylinder ←
                            Head
00120:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000

                 +
                 -
                  0
               00140:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                Arrange SecNumber
               00160:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                Arrange SecOffset
               00180:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                  Sync
               00200:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 ←
                            $

               00220:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                  Find
               00240:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000        ←
                   ScrollData
00260:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                 <
                     1 Bit
                 >
               00280:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                 <
                     2 Bits
                 >
               00300:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                 <
                     4 Bits
                 >
               00320:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                 <

               Bytes
                >
               00340:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
                  Quit MFM-Editor
```

```
00360:0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
Error: pay fee !!!
```

1.12 mfm read

Reads a track from disk.

1.13 mfm write

Writes the track back to disk.

1.14 mfm indexsync

Toogles the indexsync mode. AmigaDOS does not use indexsync but PC-DOS does.

1.15 mfm trackinfo

Displays some informations about the track (format, checksumms, etc.).

1.16 mfm writelen

Number of bytes (decimal) to write to the disk. On 880KB disks, AmigaDOS
uses 11968 bytes of data (11*1088) and the rest of about 700 bytes are the
gap.

1.17 mfm prewrite

Number of bytes (decimal) to write before the real data. These bytes are
0xAA which is decoded 0x00. PreWrite is used to delete possible syncs in the
gap because the real data is less than would fit on the disk. PreWrite is
not used if IndexSync is on.

1.18 mfm cyl.

Number of the Cylinder to read/write.

1.19 mfm head

Select head 0 or 1.

1.20   mfm arrange sn

The sectors are arranged by the sector number. This means at offset 0 will
be sector 0, offset 1088 sector 1, ..., offset 10880 sector 10.

1.21   mfm arrange so

The sectors are arranged by the sector offset like they are written to the
disk by AmigaDOS. In the error-line (right last line below the gadgets) it
is displayed in which order the sectors are arranged, '-' means sector not
found. Additionaly the gap is arranged after the last sector.

1.22   mfm sync

DiskMonTools searches the given SYNC-word and if found the data will be
arranged, that the SYNC-word is at offset 0.

1.23   mfm find

Searches the giver word. If found, a requester appears
where you can continue searching or stop searching.

1.24   mfm sync,find

Enter the word to find/sync.

1.25   mfm scroll data

Cycles the data 1,2,4 bit or a given number of bytes left or right.

1.26   mfm quit

Returns to main menu.

1.27   mfm error

Errors are displayed on the last line at the right side.

1.28   DiskMonTools DiskOptimizer

```
                    Root/BAM  Dirs  DCache  Files  FList   Data    Free    Optimize ←
                        Disk
# of boot  # of  # of    # of   # of    # of    # of
and BAM    Dirs  Dir-    Files  File-   Data    unused
               Read/Start
           blocks         Caching        Exten-  blocks  blocks
               WBMode On/Off
                           blocks        tion
           [ 1] Blocks  FFiles
                                         Blocks
            Optimize for ...

           Do SoftLinks On/Off

             Verify On/Off

           Change Date On/Off

               Quit
           You should have <Type>=R/W and >=1% for Speed          Cache < ←
               Type> + #K=#%
<Type>=Complete Disk, you may change disk after reading Read/Write Disk #%
about H hours, M minutes and S seconds to go            Remaining Time:H:M:S
Cache Usage in %                                        Cache: #%
#% of Disk finished                                     Done: #%

                                                        Errors in this Line
```

USE IT AT YOUR OWN RISK, MAKE A BACKUP BEFORE OPTIMIZING A DISK !!!

1.29   Optimize - Read/Start

```
Read: Reads the directories of the Disk and displays the Fragmentation.
      Reading does not change anything on the disk. After reading you
      can start optimizing with this gadget.
      ATTENTION: You have to set all options BEFORE 'Read'.

Start: Start Disk-Optimizing. (After "Read" is done).
       WARNING: You can't stop it, MAKE A BACKUP BEFORE STARTING.
       If Cache Type = 'Complete Disk' you can change the Disk before you
       select 'Start'
```

1.30   Optimize - Workbench Mode

```
WBMode =  ON: Optimize for Workbench, the Icons will be placed in the
              directory-area and are loaded and displayed faster.
              Select WBMode=ON if you use the disk with the Workbench.

WBMode = OFF: The directories are loaded faster, but icons take more time
              to be displayed.
```

> Select 'OFF' if you don't use the disk with the workbench.

1.31 Optimize - FastFiles

With this option you may select, if and how much blocks of a file will be
placed directly after the directory.
If this option is used, directory-scanning will be a little slower, but
programs which analyse the type of a file, like DefIcons, FInf, XFH,
DirOpus with "List format"/"File type" and others can recognize the
file-type much faster.
If using a DirCache-FileSystem you will additionally get faster directory
changes (Rename, SetDate, Change FileNote) if "FFiles" is enabled.

1.32 Optimize - Optimize for

'Read Only' : Optimize for Reading, use this if you don't write to this disk
               for example your 'Workbench'-Partition.

'Read/Write': Optimize for Reading and Writing, use this if you write often
               to this disk, for example your 'Work'-Partition.

1.33 Optimize - Do SoftLinks On/Off

This option is disabled by default, because the format of the SoftLinks
may change in future OS versions. If you use a OS 2.0 - OS 3.1 filesystem
and use SoftLinks you may enable this option. If set to 'Off' and there
is a SoftLink on the disk you will get an error message.
Do not use this option if you have a newer OS (filesystem) than 3.1 (v40).

1.34 Optimize - Verify On/Off

Verify writing 'On' or 'Off'.

You should select 'On' for floppy-disks and 'Off' for hard-disks.

Verify 'On' only verifys writing and displays the error, no retrys !
For floppy-disks it is much better to use 'Hackdisk.device' by Dan Babcock
(AmiNET:disk/misc/hackdisk202.lha or AmigaLibDisk (Fish) Nr. 803)
which does verify all writes and gives you the chance to retry writing if
there is an error. If you use Hackdisk.device set Verify to 'Off'.

1.35 Optimize - Change Date On/Off

Change disk-creation-date On or Off.

If the date is not changed, you will get read/write-errors until you reboot
for the optimized disk and if you write to the disk before rebooting you may
destroy some data on it. If you don't change the date, reboot imediately
after optimizing the disk !!!
If you optimize a disk with OS-files such as SYS: you may have to reboot
anyway.

1.36   Optimize - Quit DiskMonTools DiskOptimizer

Returns to main menu of DiskMonTools.

1.37   BAM-Editor (ONLY 1760 block drives)

Only availible for DD-Floppy-Disk (880 KB)!

In this editor you can mark blocks as used or free on a disk.
The BAM (Block-Availible-Map, Sectormap) is loaded and displayed.
'+' means the block is used and '.' is a free block. Change the status
by clicking on the cursor or pressing return.
Gadgets: 'Write BAM' writes the changes back to the disk and
        'Quit BAM' returns to the main menu without writing the changes.

1.38   File-Editor

```
          000: 00000000 00000000 00000000 00000000 ..............  File:< ↵
              name>
010: 00000000 00000000 00000000 00000000 ..............
020: 00000000 00000000 00000000 00000000 ..............
              Read Block
          030: 00000000 00000000 00000000 00000000 ..............
              Write Block
          040: 00000000 00000000 00000000 00000000 ..............
050: 00000000 00000000 00000000 00000000 ..............  Filesize:<#> Blocks
060: 00000000 00000000 00000000 00000000 ..............
              +


              _
          070: 00000000 00000000 00000000 00000000 ..............
080: 00000000 00000000 00000000 00000000 ..............
              Auto Read on/off
          090: 00000000 00000000 00000000 00000000 ..............
0A0: 00000000 00000000 00000000 00000000 ..............
          EditMode= <mode>
          0B0: 00000000 00000000 00000000 00000000 ..............
0C0: 00000000 00000000 00000000 00000000 ..............
          Display = <mode>
          0D0: 00000000 00000000 00000000 00000000 ..............
```

```
0E0: 00000000 00000000 00000000 00000000 ..............
                       Search
                  !!! The file you want to edit must not be read/write protected ↩
                     !!!

1F0: 00000000 00000000 00000000 00000000 ..............
               Error: pay fee !!!
```

1.39 fileread

Reads and displays the selected block.

1.40 filewrite

Writes the displayed block back to the file.

1.41 fileblocknr

Increase, enter, decrease the block number to view/edit.

1.42 fileauto

If 'on', any change to the block number will read and display the new block
imediately. If 'off', you have to click 'Read' to get the new block.

1.43 fileedit

Selects the mode of editing. HEX means you have to enter the data as
hexadecimal (half-)bytes, ASCII for entering characters.

1.44 filedisplay

This gadget selects which characters are displayed.
 ASCII : characters 32-127
 Visible: characters 32-127 and 160-255
 All   : characters 0-255

1.45   filesearch

A requester is displayed where you can select the startblock, endblock
and the text you whish to search. 'Stop' aborts while 'Search' starts
searching. If the text is found you can 'Stop' searching or continue
searching by clicking 'Search' again.
Search is case sensitive and no patterns are used.
If you want to search hexadecimal data you can do this by entering
'$' as the fist character (for example '$AB cd 12' which is equal to
'$ abc d12' but ' $AbcD12' is wrong because of the space before the '$').

1.46   filequit

Return to main menu.

1.47   fileerror

Errors are displayed on the last line at the right side.

1.48   undelete

With Undelete you can recover deleted files.
After scanning the disk for deleled files you can select which files
you want to undelete by selecting the files in the listview-gadget or
by using the gadgets All , None and Recursive .
If you are searching a file you may switch off Tree and all files
will be displayed.
You can (de-)select files with Include and Exclude and
the pattern entered in the string-gadget.
After selecting the files you can use Undelete to copy as much as
possible from the deleted files to a slectable directory.
Use Quit to quit Undelete.

1.49   cleanup

With CleanUp it is possible to remove the deletet files, so
that they are no longer found in Undelete/Salvage.
Undelete/Salvage will be faster and only files deleted
after Cleanup will be found.
With Restore you can undo CleanUp .

1.50   salvage

```
                Salvage is the same as
                Undlete
                 with two exeptions:
the whole partition is scanned for files and it works even if the
partition is not validatet.
```

1.51 Audio CD-Player

A simple CD Player for Audio-CDs.

```
 1 - 25  plays from the selected song to the end of the CD.
 |<  plays the previous song.
 Play  starts playing.
 Stop  stopps playing.
 >|  plays the next song.
 Quit  quits the CD-Player (but does not stop playing).
```

I have writte this CD-Player because no other CD-Player works
with my CD-Drive. This CD-Player does not have much functions, if your
drive works with other players you may want to use them, besause most
other players have more functions. If your drive does not work with
other players you may try this one because it uses difrent SCSI-direct-
commands.

```
Tested CD-Drives:
- Amiga 4000/030, BTC CDD-157, A4000-AT-Controller + SPEEDUP

- Amiga 4000/040, AppleCD300 (Sony 8003), Supra SCSI Controller

- Amiga 2000/030, NEC SCSI CD-Rom drive, A2091 Controller

- Amiga 1200, Chinon CDS-545, A1200-AT-Controller + RandyRom (IDEFix)

- Mitsumi CD-Rom drive, Tandem Controller
```

1.52 speed

Tests the read-performace of the selected drive.

This test performs (for 5 seconds) sequential reads of data
of the size displayed in brackets.
The last size is the blocksize used by the FileSystem.

1.53 File-Editor (RAM)

```
            |   00000000 00000000 00000000 00000000 .............. File:< ←
                Filename>
|   00000000 00000000 00000000 00000000 ..............
|   00000000 00000000 00000000 00000000 .............. Size:<Size of the file>
```

```
|    00000000 00000000 00000000 00000000 ..............
|    00000000 00000000 00000000 00000000 ..............  Pos :<Cursor-position>
|    00000000 00000000 00000000 00000000 ..............
|    00000000 00000000 00000000 00000000 ..............
                      Save as ...
               |    00000000 00000000 00000000 00000000 ..............
|    00000000 00000000 00000000 00000000 ..............
                 Search/Next/Prev.
               |    00000000 00000000 00000000 00000000 ..............
|    00000000 00000000 00000000 00000000 ..............
                  EditMode= <mode>
               |    00000000 00000000 00000000 00000000 ..............
|    00000000 00000000 00000000 00000000 ..............
                  Display = <mode>
               |    00000000 00000000 00000000 00000000 ..............
|    00000000 00000000 00000000 00000000 ..............
                      Quit




                   !!! The file you want to edit must not be read protected  ←┘
                       !!!



               |    00000000 00000000 00000000 00000000 ..............
                 Error: pay fee !!!
```

1.54   Save as ...

Save as ... opens a file-requester where you can select the name which
is used to save the changed file. Of course you may select the same name
but you will overwrite the old file.

1.55   Search data

You can enter a text you whish to search.
Search is case sensitive and no patterns are used.
If you want to search hexadecimal data you can do this by entering
'$' as the fist character (for example '$AB cd 12' which is equal to
'$ abc d12' but ' $AbcD12' is wrong because of the space before the '$').
Next will search the next occurrence of the text.
Prev. searches backwards.

1.56   edit-mode

Selects the mode of editing. HEX means you have to enter the data as
hexadecimal (half-)bytes, ASCII for entering characters.

1.57 display-mode

```
This gadget selects which characters are displayed.
 ASCII  : characters 32-127
 Visible: characters 32-127 and 160-255
 All    : characters  0-255
```

1.58 quit file-monitor

```
Return to main menu.
```

1.59 Proportional-Gadget

```
With this gadget you may select the position inside the file.
```

1.60 Errors

```
Errors are displayed on the last line at the right side.
```